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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,092	11/13/2003	Lawrence J. Karr	50037.0065USD4	9493

27488 7590 03/26/2007  
 MERCHANT & GOULD (MICROSOFT)  
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 MINNEAPOLIS, MN 55402-0903

EXAMINER
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NGUYEN, DUC M

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/714,092

Applicant(s)

KARR ET AL.

Examiner

Duc M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-33 and 44-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-33, 44-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This action is in response to applicant's response filed on 1/19/07. Claims 30-33, 44-59 are now pending in the present application. **This action is made final.**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims **30-33, 44-59** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 30, 50, 56, the claims recite the limitation of "adjusting a variable tuning element..." which apparently claiming a variable tuning element for the antenna of a localcast transmitter. However, it is noted that the specification only disclose a variable tuning antenna for the mobile device for receiving scheduled massages broadcasted from a broadcast transmitter (see specification, page 5, line 26 – page 6, line 2). Therefore, the claim(s) contains new subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims **30-33, 44-59** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the mobile station that comprises a variable tuning antenna.

As to claims 30, 50, 56, the claims recite the limitation of "adjusting a variable tuning element..." which apparently claiming a variable tuning element for the antenna of a "localcast" transmitter. However, it is noted that the specification only disclose a variable tuning antenna for the mobile device for receiving scheduled messages broadcasted from a broadcast transmitter (see specification, page 5, line 26 – page 6, line 2). Therefore, the claims are considered as being incomplete for omitting essential steps, such omission amounting to a gap between the steps such as a mobile device for receiving the locally formatted data, wherein the mobile device comprises an adjustable tuning element for tuning the antenna in response to the locally formatted data, and wherein the locally formatted data is a scheduled message.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **30-33, 44-45, 49-59** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kaiser** (US **6,060,996**) in view of **Gaskill et al** (US **5,301,358**), hereafter Gaskill'358, and **Gaskill et al** (US **4,713,808**), hereafter Gaskill'808.

Regarding claim **30**, **Kaiser** discloses a method of re-broadcasting data transmitted over an FM subcarrier (see col. 5, lines 17-37), comprising:

- receiving at a localcast transmitter said transmitted data (see col. 2, lines 23-40), wherein the mobile paging transceiver 130 would read on the "localcast transmitter";
- locally formatting said transmitted data for local-area wireless transmission (see col. 5, lines 17-37).
- retransmitting said locally formatting data to a local-area (see col. 2, lines 23-40 and Fig. 8).

However, **Kaiser** fails to teach a variable tuning antenna for the mobile device. However, Gaskill'358 teaches a variable tuning antenna for a mobile device (see Abstract, Fig. 1), wherein the antenna is periodically retuned during a listener interval, prior to the receipt of a packet of information (see col. 3, lines 1-20). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate teaching of Gaskill'358 to **Kaiser** to provide a variable tuning antenna for the paging transceiver in **Kaiser** as well, for improving data reception quality. Since the broadcast data in **Kaiser** would obviously, if not **implicitly**, be scheduled for transmission as disclosed by Gaskill'808 (see col. 21, lines 12-17), **Kaiser** in view of

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Gaskill's references, would teach a paging transceiver that adjusts a variable tuning element configured to tune an antenna in response to a scheduled message reception as claimed, for improving data reception quality.

Regarding claim **50**, the claim is rejected for the same reason as set forth in claim 30 above, wherein the mobile paging transceiver 130 would read on the "localcast transmitter", the pager 110 would read on the "mobile device".

Regarding claim **56**, the claim is rejected for the same reason as set forth in claim 30 above, wherein the paging network would inherently comprise a broadcast transmitter (see **Kaiser**, Fig. 1 regarding ref. 108).

Regarding claim **59**, the claim is interpreted and rejected for the same reason as set forth in claim 30 above.

Regarding claims **31-32, 51-52, 58**, the claims are rejected for the same reason as set forth in claim 30 above. In addition, since the "local content" or "application information" are information data received at the "localcast device", and would be re-transmitted to mobile devices when needed (i.e, upon request by a mobile device). Therefore, it would have been obvious for the localcast transmitter to retransmit "local content" or "application information" as claimed, for supplying information data upon request by mobile devices.

Regarding claims **33, 53, 57**, the claims are rejected for the same reason as set forth in claim 30 above. In addition, since the mobile paging transceiver 130 is a "mobile device", this would read on the "first mobile device", the pager 110 would read on a

“second mobile device” (see Fig. 1, noting that the mobile paging transceiver 130 is mounted on a “vehicle”).

Regarding claims **54-55**, the claims rejected for the same reason as set forth in claim 33 above, wherein it is clear that two “mobile devices” would communicate to each other when they both are in a localcast mode (i.e, low power communication link).

Regarding claim **44**, the claim is rejected for the same reason as set forth in claim 30 above. In addition, it is clear that **Kaiser** would disclose the low power link uses a locally-unused FM frequency for retransmitting data in the local area (see col. 5, lines 16-37).

Regarding claim **45**, the claim is rejected for the same reason as set forth in claim 44 above. In addition, it is clear that **Kaiser** would disclose a controller be utilized as disclosed by for setting a desired transmission frequency, setting a desired transmission mode (i.e, localcast mode or broadcast mode), and signal power (i.e, low power link) as claimed (see col. 5, lines 17-37).

Regarding claim **49**, **Kaiser** would disclose generating an FM frequency output from the transmitted data as claimed (see col. 5, lines 17-37).

7. Claims **46-48** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Kaiser** in view of **Gaskill** and further in view of **Chadwick** (US 5,168,271).

Regarding claims **46-48**, the claims are rejected for the same reason as set forth in claim 30 above. In addition, since such features as recited in the claims (i.e, adding correlation, interleaving and format baseband samples) are known features of an

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encoder/modulator as disclosed by **Chadwick** (see Fig. 2 and col. 4, line 36 – col. 6, line 22), it would have been obvious to one skilled in the art at the time the invention was made to provide the encoder/modulator in Chadwick's teaching to the transceiver in Kaiser as well, for improving data reception errors.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 30-33, 44-59 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See the attached PTO-892.

11. **Any response to this final action should be mailed to:**

Box A.F.

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner  
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,  
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Matthew Anderson (Supervisor) whose telephone number is (571) 272-  
4177.

Duc M. Nguyen, P.E.

Mar 18, 2007

